BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF THE PROJECT: IMPROVEMENTS OF PATHWAY AND GRILL FENCING TO RAJIV GANDHI PARK IN WARD NO-05.

Sl No	Description of Item	Unit	No	L	B	D	Qty	Est.Cost.Rs. Rate	20000000.00 Amount
1	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. (PWD SR 2021-22 Vol -I Pg 5 item No. 1.4.1)								
	For Vidhansoudha Grill								
	North Side	Cum	1	41.00	0.90	1.35	49.82		
	South side	Cum	1	78.50	0.90	1.35	95.38		
	West Side	Cum	1	111.90	0.90	1.35	135.96		
	East Side	Cum	1	117.30	0.90	1.35	142.52		
	For Pathway								
		Cum	1	4.10	6.50	0.20	5.33		
		Cum	1	2.90	4.20	0.20	2.44		
		Cum	1	425.90	2.45	0.20	208.69		
		Cum	1	23.60	1.60	0.20	7.55		
		Cum	1	6.40	1.00	0.20	1.28		
	Rain water Harvesting	**Cum**	4	1.33		3.00	15.92		
				(3.14X1.3X1.3)/4=1.33					
	Basic rate							186.00	
	Area weightage 10%							18.60	
	Total						**664.88**	**204.60**	**136035.00**
2	Providing and laying in position plain cement concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (PWD SR 2021-22 Vol -I Pg 15 item no								
	SSM Footing								
	For Vidhansoudha Grill								
	North Side	Cum	1	41.00	0.90	0.15	5.54		
	South side	Cum	1	78.50	0.90	0.15	10.60		
	West Side	Cum	1	111.90	0.90	0.15	15.11		
	East Side	Cum	1	117.30	0.90	0.15	15.84		
	Infront of Gate	Cum	1	5.20	1.00	0.15	0.78		
	Basic rate							**5554.00**	
	Area weightage 10%							555.40	
	Total						**47.85**	**6109.40**	**292363.00**
3	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand) (Vol 2/ P No-9/ 1 no- 5.4 of PWD SR 2021-22)								
	Below Ground								
	For Vidhansoudha Grill								
	North Side	Cum	1	41.00	0.75	1.20	36.90		
	South side	Cum	1	78.50	0.75	1.20	70.65		
	West Side	Cum	1	111.90	0.75	1.20	100.71		
	East Side	Cum	1	117.30	0.75	1.20	105.57		
	Above Ground								
	For Vidhansoudha Grill								
	North Side	Cum	1	41.00	0.60	0.45	11.07		
	South side	Cum	1	78.50	0.60	0.45	21.20		

No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
	West Side	Cum	1	111.90	0.60	0.45	30.21		
	East Side	Cum	1	114.30	0.60	0.45	30.86		
	Deduction								
	For Vidhansoudh Grill Pole	Cum	-117	0.60	0.60	0.45	-18.95		
	Basic rate								
	Area weightage 10%							5352.00	
	Total							535.20	
							388.22	**5887.20**	**2285500.00**
4	Providing Flush/ Ruled pointing: Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine sand) after raking joints to depth nicely lining, including cost of materials, labour, curing as per specifications and as per directions of Engineer-in-charge. (PWD SR 2021-22 Vol -II Pg 44 item No. 8.19.1)								
	For Vidhansoudha Grill								
	North Side	Sqm	2	41.00		0.45	36.90		
	South side	Sqm	2	78.50		0.45	70.65		
	West Side	Sqm	2	111.90		0.45	100.71		
	East Side	Sqm	2	114.30		0.45	102.87		
	Basic rate							199.00	
	Area weightage 10%							19.90	
	Total						**311.13**	**218.90**	**68107.00**
5	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) Mix 1:2:4 (M15) Using 20 mm nominal size graded crushed coarse aggregates (PWD SR 2021-22 Vol -I Pg 17 item no 2.4.1)								
	Copping Concrete								
	For Vidhansoudha Grill								
	North Side	Cum	1	41.00	0.60	0.10	2.46		
	South side	Cum	1	78.50	0.60	0.10	4.71		
	West Side	Cum	1	111.90	0.60	0.10	6.71		
	East Side	Cum	1	114.30	0.60	0.10	6.86		
	PCC for Kerb								
		Cum	2	6.40	0.20	0.10	0.26		
		Cum	1	861.10	0.20	0.10	17.22		
	For Pathway								
		Cum	1	4.10	6.50	0.15	4.00		
		Cum	1	2.90	4.20	0.15	1.83		
		Cum	1	425.90	2.45	0.15	156.52		
		Cum	1	23.60	1.60	0.15	5.66		
		Cum	1	6.40	1.00	0.15	0.96		
	Basic rate							5880.00	
	Area weightage 10%							588.00	
	Total						**207.19**	**6468.00**	**1340084.00**

No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
6	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (PWD SR 2021-22 Vol -I Pg 17 item no 2.4.2)								
	For Vidhansoudh Grill Pole	Cum		117	0.60	0.60	0.45	18.95		
	Infront of Gate	Cum		1	5.20	1.00	0.15	0.78		
	Basic rate								5968.00	
	Area weightage 10%								596.80	
	Total							**19.73**	**6564.80**	**129550.00**
7	Fabricating, providing and erecting in position of MS. Hot dip galvanized Sq. Hallow Poles of 132*132 Heavy gauge of length 3000mm with MS. Hot dip galvanized grill work as per approved design and drawing of chief architect. Using 12*75mm galvanized flat for alround frame and 20mm 20mm galvanized- forged design with square for vertical at 150mm C/C as shown in the drawing including providing forged ornamental arrowhead at top and bottom. The work is inclusive of throughing flat, square rods, placing welding all the joints, including grinding, finishing 2 coats of anticorrosive paint over one coat of metal primer. The rate is inclusive of all materials like MS. Hollow galvanized pipe, flat, forged square rods, cost of labour for all items of work cost painting, welding, cutting, grinding with all lead and lift as per specification including loading with cost and conveyance of all materials, labour, machinery and incidental charges for the successful complete of the work as per the direction Engineer-in-charge of								
	For Vidhansoudha Grill									
	North Side	Sqm		1	41.00		1.80	73.80		
	South side	Sqm		1	78.50		1.80	141.30		
	West Side	Sqm		1	111.90		1.80	201.42		
	East Side	Sqm		1	114.30		1.80	205.74		
	Data Rate								15630.00	
	Total							**622.26**	**15630.00**	**9725924.00**
8	Fabricating, providing and erecting in position Hot dip galvanised Gate. Using 72*72*4.8mm Sq. GI Pipe frame with top pipe bending in heavy duty hydraolic press with sand packing and hot bending to form double arch as per drawing profile,20mm hot dip galvanised sq.rod for verticals at 150mm c/c, as shown in the drawing including providing hot dip galvanised forged ornamental design in between sq.rods and heads at top,middle and bottom. Intermediate supports of 75*12mm and 50*6mm arch bent to hot dip galvanised flats the work is inclusive of throughing GI.flat GI sq.rods,placing, welding all the joints including grinding, finishing metal patty,painting wo coats enamel painting. The rate is inclusive of all materials like GI sq.pipe,GI.Sq.rods,GI forged designs etc., heavy duty hinges are made out of 75mm solid sq.block assembled with 20mm dia bearing in the three places for each flop. Heavy duty locking arrangements at low places including cost of labou.pailnting, erecting charges using hoist pulley cranes with all lead and lift, loading,transportation,unloading,scaffolding charges and all other incidental charges for sucessful completion of the work as per directions of the Engineer-in-charge of the work								
	New Gate	Sqm		1	3.50		2.40	8.40		
		Sqm		1	2.30		2.10	4.83		
		Sqm		1	2.00		2.10	4.20		
	Data Rate								21350.00	
	Total							**17.43**	**21350.00**	**372131.00**
9	Removing and Resetting of Cobble Stone (Data Rate)									
	For Pathway	Sqm		1	4.10	6.50		26.65		
		Sqm		1	2.90	4.20		12.18		
		Sqm		1	425.90	2.45		1043.46		

	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
		Sqm	1	23.60	1.60		37.76		
						Total	1120.05		
	Deduct Missing/Damaged Cobble stone 80%						896.04		
	Data Rate							380.00	
	Total						224.01	380.00	85124.00
10	Providing and laying heavy duty cobble stones 60mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per m2 over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level , including cost of materials, labour and Usage charges of machinery complete as per specifications. (PWD SR 2021-22 Vol -II Pg 64 item no 9.31)								
	For Pathway	Sqm	1	6.40	1.00		6.40		
	Missing Cobbleb Qty Vide From Item No 0						896.04		
	Basic rate							1087.00	
	Area weightage 10%							108.70	
	Total						902.44	1195.70	1079043.00
11	Removing and Resetting of Kerb Stone (Data Rate)								
	Pathway Kerb	m	1	861.10			861.10		
	Deduct Missing/Damaged Cobble stone 75%						645.83		
	Data Rate							118.00	
	Total						215.28	118.00	25403.00
12	Providing and fixing pre cast solid cement concrete Kerb Stones made out of M20 with top and bottom width 114 and 165mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading, unloading, lead and lift transportion etc., complete as directed by the Engineer in charge of the work(from finish concrete and no painting to								
	Pathway Kerb	m							
		m	2	6.40			12.80		
	Missing Kerb Qty Vide Item No 5						645.83		
	Total length	m					658.63		
	No of Kerb Stones	Nos				Total Length/0.45	1464.00		
	Sub Total	Nos					1464.00		
	Data Rate							507.00	
	Total						1464.00	507.00	742248.00
13	Painting Two Coats on New Concrete Surfaces Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concretesurfaces. MORTH Chapter 803 (PWD SR 2021-22 Vol III Pg no 56 Item No								
	Kerb Painting	Sqm							
	Pathway Kerb	Sqm	2	6.40		0.35	4.48		
		Sqm	1	861.10		0.35	301.39		
								85.00	
	Basic rate							8.50	
	Area weightage 10%						305.87	93.50	28599.00
	Total								

No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
14	Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets Clause 1101.6. 1200mm dia (V-3, P.No-134, I No-20.16 A of PWD SR 2021-22)								
	Rain water Harvesting	**Cum**	4	3.00			12.00		
	Basic rate								
	Area weightage 10%							8161.00	
	Total						**12.00**	**8977.10**	**107726.00**
15	Providing and Filling in foundation with granite / trap broken metal 100mm and down size with approved M-Sand including hand packing, ramming, watering including cost of all materials and labour with all lead and lift complete as per specifications. (V-5, P.No-64, I No-9 A130A of PWD SR 2021-22)								
	Rain water Harvesting	Cum	4	1.33		0.45	**2.39**		
				(3.14X1.3X1.3)/4=1.33					
	Basic rate							1593.00	
	Area weightage 10%							159.30	
	Total						**2.39**	**1752.30**	**4185.00**
16	Granular Aggregates, 53mm downsize (V-1, P.No- A 38, I No-8 of PWD SR 2021-22)								
	Rain water Harvesting	**Cum**	4	1.33		0.45	**2.39**		
				(3.14X1.3X1.3)/4=1.33					
	Basic rate							1250.00	
	Total						**2.39**	**1250.00**	**2985.00**
17	Granular Aggregates, 20mm downsize (V-1, P.No- A 38, I No-4 of PWD SR 2021-22)								
	Rain water Harvesting	Cum	4	1.33		0.45	**2.39**		
				(3.14X1.3X1.3)/4=1.33					
	Basic rate							1350.00	
	Total						**2.39**	**1350.00**	**3224.00**
18	Sand - M-Sand –Fine (V-1, P.No- A 41, I No-71 of PWD SR 2021-22)								
	Rain water Harvesting	Cum	4	1.33		0.30	**1.59**		
				(3.14X1.3X1.3)/4=1.33					
	Basic rate							1488.00	
	Total						**1.59**	**1488.00**	**2369.00**
19	**Loading and Unloading of Stone Boulder**/Stone aggregates/ Sand/Kankar/Moorum. (Tipper 5.5 m3) (PWD SR 2021-22 Vol-III Page No.3, Item No.1.1A)								
	Qty Vide frm Item No-01	**Cum**					**664.88**		
	Basic rate							118.00	
	Area Weightage 10%							11.80	
	Total						**664.88**	**129.80**	**86302.00**
20	**Cost of Haulage** Excluding Loading and Unloading Taking output 10 t load and lead 10 km = 100 t.km (PWD SR 2021-22 Vol-III Page No.3, Item No.1.4A)								
	Qty frm Item No-19	**t.Km**		664.88	1.28		**851.05**		
								96.00	
	8Km 12*8							9.60	
	Area Weightage 10%						**851.05**	**105.60**	**89871.00**
	Total								

Sl. No	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
								Total Amount	16606773.00
								GST Charges (18% of estimated cost)	2989220.00
								DPR Charges (1% of estimated cost)	200000.00
								Project management And Consultancy Charges(1% of estimated cost)	200000.00
								Miscellaneous and Rounding off	4007.00
								Grand Total	20000000.00

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on, PWD SR 2021-22 and Data rates, PWD Electrical 2021-22, approved Rate, Issued Rates and Corrigendum 1, 2 & 3.

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP

RUDRAPRASAD CONSULTANTS
BANGALORE

Technical Sanction
Accorded For ...Estimate only
Head of A/C.....
CER NO :...181..... Dt:...3/3/2023

Administrative Sanction for Rs. ...200.00 Lakhs
...Rupees Two Crores Only...
is accorded under head ...P-3075...
...Compound wall ...Sitting in charge...
...MAINT. Discretionary Grants...
Registered as CE No. ...49... Subject
to conditions contained in
No. BBMP/EE/Vm-P/Pro/49/22-23 ... 29/3/2023

Executive Engineer